

### **REMARKS/ARGUMENTS**

In response to the Examiner's Office Action of February 21, 2006 the Applicant respectfully submits the accompanying Terminal Disclaimer, Amendment to the abstract and claims and the below Remarks.

#### ***Regarding Amendment***

In the Amendment:

At Page 1 of the Specification, the first line has been deleted to be replaced by a paragraph entitled "Cross-References to Related Applications".

the abstract is amended to replace the term "comprises" with --has-- and the restrict the length to less than 150 words;

independent claims 1, 19 and 38 are amended to specify that the claimed inlets and nozzles are micron-sized and the claimed openings are substantially larger than the inlets, such that the passages in the laminated structures 'funnel' the ejectable liquid from the openings to the inlets. Support for this amendment can be found, for example, at page 13, lines 20-25 and page 39, line 17-page 41, line 14 of the present specification;

dependent claims 2, 20 and 39 are amended to replace the recitation "openings is the" with --openings in the-- and the recitations of "elongate" with --elongated--; and

dependent claims 3-18, 21-37 and 40-54 are unchanged.

It is respectfully submitted that the above amendments do not add new matter to the present application.

#### ***Regarding Specification***

It is respectfully submitted that the above-described amendment of the abstract provides the correction required by the Examiner.

#### ***Regarding Provisional Non-Statutory Double Patenting Rejections***

With respect to the provisional non-statutory double patenting rejection of pending claims 1-54 over claims 1-54 of copending Application No. 10/728,779 in view of Thiel (US 5,714,078), a terminal disclaimer in compliance with 37 C.F.R. 1.321(c) is being submitted herewith; the present application and Application No. 10/728,779 being commonly owned by the Applicant.

#### ***Regarding Claim Objections***

It is respectfully submitted that the above-described amendment of claim 2 (and claims 20 and 39), provides the correction required by the Examiner.

#### ***Regarding 35 USC 103(a) Rejections***

*Regarding Kubby (US 5,706,041) in view of Thiel and Silverbrook (US 5,856,836)*

It is respectfully submitted that the subject matter of above-described amended independent claims 1, 19 and 38, and claims 2-4, 7, 9, 11, 18, 20-23, 27, 28, 30, 37, 39-41, 45, 47 and 54 dependent therefrom, is not taught or suggested by Kubby in view of Thiel and Silverbrook, for at least the following reasons.

In the present invention, the multi-layer printhead chips 81 are used so that the ink 11 and compressed air can be delivered from their respective supplies at the macro-sized holes 98 in the lower layer 90 of the stack to the micron-sized holes 84 in the upper layer 83 so as to be delivered to the nozzles 3. Thus, the fluids are delivered over a series of stages where the channels and apertures in each stage from fluid flow decrease in size, thereby funnelling the fluid from the supply openings to the nozzles (see page 2, lines 19-23, page 13, lines 20-25 and page 39, line 17-page 41, line 14 of the present specification). Independent claims 1, 19 and 38 have been amended to recite these features of the present invention.

On the other hand, as admitted by the Examiner, Kubby does not teach laminating a plurality of structures together so that passages within the structures funnel ejectable liquid from inlets of the printhead. To this end, the Examiner cites Thiel as purportedly teaching these features.

However, Thiel merely discloses an edge-shooter ink jet print head formed as a module with a first member 2 carrying ink chambers 101, nozzles 1 and suction chamber 15, a centre member 3 having openings 9,14,18, and a second member 4 carrying ink chamber 102 and supply opening 16. This structure is used so that sufficient space is provided for the multiple ink chambers for feeding ink to the multiple nozzles whilst retaining print quality (see col. 11, line 32-col. 12, line 12 of Thiel).

That is, the ink chambers, openings and nozzles are all substantially of the same size, as clearly seen from Fig. 4 of Thiel. This is because, the module is merely used to distribute ink to the nozzles, rather than 'funnel' the ink from macro-sized openings to micro-sized nozzles, as in amended independent claims 1, 19 and 38. Thus, no combination of Kubby and Thiel would teach or suggest configuring laminated structures to 'funnel' ejectable liquid from liquid supply openings to micron-sized inlets and nozzles at the printhead, where the openings are substantially larger than the inlets.

Silverbrook does not make up for this deficiency in Kubby and Thiel, because Silverbrook similarly does not teach or suggest configuring laminated structures to 'funnel' ejectable liquid from liquid supply openings to micron-sized inlets and nozzles at the printhead, where the openings are substantially larger than the inlets.

Thus, the subject matter of amended independent claims 1, 19 and 38, and claims 2-18, 20-37 and 39-54 dependent therefrom, is taught or suggested by Kubby either taken alone or in combination with Thiel and/or Silverbrook.

*Regarding Kubby, Thiel and Silverbrook further in view of other cited references*

It is respectfully submitted that the subject matter of dependent claims 5, 6, 8, 10, 12-17, 24-26, 29, 32-36, 42-44, 46 and 48-53, is not taught or suggested by Kubby, Thiel and Silverbrook further in view of one or more of the other cited references in Dunn (US 4,982,199), Feinn et al. (US 6,543,879), Watrobski et al. (US 5,742,307), Silverbrook (US 5,841,452), Mitani et al. (US 5,831,648), Kashino et al. (US 5,534,898), Komuro (US 4,965,594), Chan (5,710,070) and Pan et al. (US 4,931,813), for at least the above discussed reasons and because none of the other cited references teach or suggest configuring laminated structures to 'funnel' ejectable liquid from liquid supply openings to micron-sized inlets and nozzles at the printhead, where the openings are substantially larger than the inlets.

It is respectfully submitted that all of the Examiner's rejections have been traversed. Accordingly, it is submitted that the present application is in condition for allowance and reconsideration of the present application is respectfully requested.

Very respectfully,

Applicant:



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